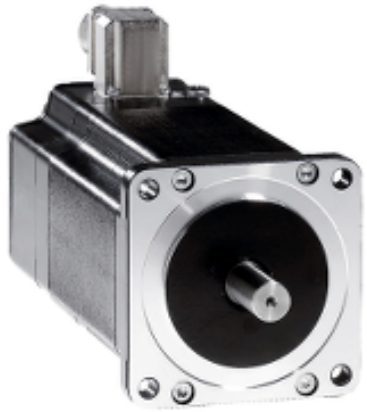
Product data sheet
Characteristics

BRS39BW461FCA
3-phase stepper motor - 6.78 Nm - shaft Ã˜ 14 mm - L=128 mm - with brake - conn



Main

Range compatibility	Lexium SD3
Product or component type	Motion control motor
Device short name	BRS3
Maximum mechanical speed	3000 Rpm
Motor type	3-phase stepper motor
Number of motor poles	6
Supply voltage limits	230 V AC 325 V DC
Mounting support	Flange
Motor flange size	85 Mm
Length	171 Mm
Centring collar diameter	60 Mm

Complementary

Centring collar depth	2 Mm
Number of mounting holes	4
Mounting holes diameter	6.5 Mm
Circle diameter of the mounting holes	98.99 Mm
Electrical connection	Connector
Feedback type	Single turn encoder
Speed feedback resolution	10000 points/turn
Holding brake	With
Shaft end	Untapped
Second shaft	Without second shaft end
Shaft diameter	14 Mm
Shaft length	30 Mm
Nominal torque	6 N.M
Peak stall torque	5.78 N.M
Continuous stall torque	5.78 N.M
Holding torque	6.78 N.M
Rotor inertia	3.3 Kg.Cm²
Resolution	1000 points/turn 1.8 °, 0.9 °, 0.72 °, 0.36 °, 0.18 °, 0.09 °, 0.072 °, 0.036 ° step angle 200, 400, 500, 1000, 2000, 4000, 5000, 10000 steps number of full steps per revolution
Accuracy error	+/- 6 arc min
Maximum starting frequency	5.3 KHz
[In] rated current	2.25 A
Resistance	6.5 Ohm (winding)

Time constant	10 Ms
Maximum radial force Fr	110 N (first shaft end) 50 N (second shaft end)
Maximum axial force Fa	175 N (tensile force) 30 N (force pressure)
Service life in hours	20000 H (bearing)
Angular acceleration	200000 Rad/S²
Net weight	4.3 Kg

Environment

Standards	IEC 50347 IEC 60072-1
Type of cooling	Natural convection
Ambient air temperature for operation	-25…40 °C
Ambient air temperature for storage	-25…70 °C
Operating altitude	<= 1000 m without power derating
Relative humidity	15…85 % without condensation
Vibration resistance	20 m/s² maximum A conforming to IEC 60034-14
IP degree of protection	IP41 shaft bushing: conforming to IEC 60034-5 IP56 total except shaft bushing: conforming to IEC 60034-5
Temperature class	F winding conforming to IEC 60034-1

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	19.500 Cm
Package 1 Width	22.000 Cm
Package 1 Length	40.500 Cm
Package 1 Weight	6.868 Kg
Unit Type of Package 2	S04
Number of Units in Package 2	2
Package 2 Height	30 Cm
Package 2 Width	40 Cm
Package 2 Length	60 Cm
Package 2 Weight	14.386 Kg
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	75.000 Cm
Package 3 Width	80.000 Cm
Package 3 Length	60.000 Cm
Package 3 Weight	65.544 Kg

Offer Sustainability

Recyclability potential, in %	93
Total lifecycle Carbon footprint	2 390 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	111.6520774726732
Carbon footprint of the manufacturing phase [A1 to A3]	112 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	1.7836650480548624
Carbon footprint of the distribution phase [A4]	2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	1.8905974629095479
Carbon footprint of the installation phase [A5]	2 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	2269.6073830443133
Carbon footprint of the use phase [B2, B3, B4, B6]	2 270 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	5.0353593435710735

Carbon footprint of the end-of-life phase [C1 to C4]	5 kg CO2 eq.
Total lifecycle Carbon footprint	2390
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, w
PVC free	Yes
End of life manual availability	No need of specific recycling operations Circularity Profile
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised